



GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCE  
INDIA METEOROLOGICAL DEPARTMENT

**METEOROLOGICAL CENTRE, RANCHI**

# Gramin Krishi Mausam Sewa

For

## JHARKHAND

**Bulletin No. 65**

**Wednesday 16<sup>th</sup> August, 2017**

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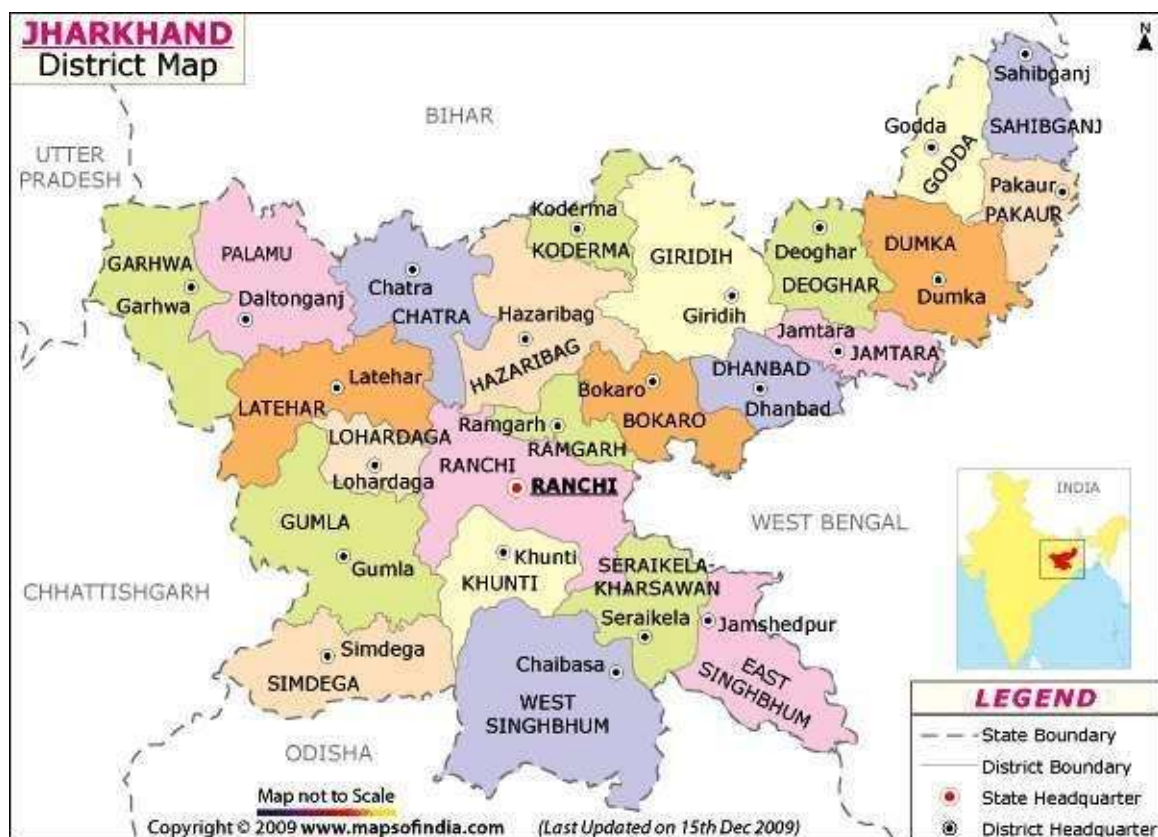
*In collaboration with*  
Birsa Agricultural University, Kanke, Ranchi  
&  
Department of Agriculture Animal Husbandry & Co-operative  
Govt. of Jharkhand

## Meteorological Sub-Division of the state

*As per IMD classification Jharkhand State consisting of twenty four districts is considered as one meteorological subdivision.*

### Agro Climatic Zones for the State of Jharkhand

S.No.	Agro climatic Zone	Districts	Agromet Field Unit(AMFU)
1	<b>Central &amp; Western Plateau Zone</b>	Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega	Ranchi
2	<b>Central and North Eastern Plateau Zone</b>	Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma	Dumka
3	<b>South Eastern Plateau Zone</b>	West Singhbhum, East Singhbhum, Saraikela	Darisai



**DISTRICT LEVEL WEATHER FORECAST**  
**ISSUED ON: 16.08.2017**  
**VALID FOR THE NEXT 5 DAYS**

Summary of observations recorded at Ranchi, Jamshedpur, Daltonganj, Bokaro & Chaibasa during 11.08.2017 to 16.08.2017

PARAMETERS		Ranchi	Jamshedpur	Daltonganj	Bokaro	Chaibasa
Total rainfall (mm)		70.0	138.6	20.1	114.6	12.1
Max Temp range (°C)		26-31	30-33	29-33	29-31	28-32
Min Temp range(°C)		21-22	25-26	25-27	25-26	22-27
Cloud Coverage (octa )		7	7	7	6	7
Relative Humidity (%)		66-100	60-97	68-98	82-99	NA
Wind Direction/ Speed (kmph)	Morning	W	W	W	W	CALM
		7	4	5	5	0
	Evening	NW	W	W	N/A	CALM
		8	4	5	N/A	0

- **Monsoon Watch:** SW Monsoon remained **NORMAL** over Jharkhand during last 24 hrs.
- **Realized Weather (during past 24 hrs.):** Heavy rain at isolated places & Light to moderate rainfall with Thundershowers occurred at many places over Jharkhand.
- **Rainfall in cm (during past 24 hrs.):** Jamshedpur City -- 8; Jamshedpur MO -- 7; Rajmahal -- 6; Tenughat -- 4; Kharsema, Ghatsila, Bokaro -- 3 each; Satgaon, Raidih, Palkot -- 2 each; Simdega, Latehar, Tilaiya Pathargama, Boarijor, Barkisurainya, Putki, Dhanbad, Koner -- 1 each.
- **Synoptic feature:**
  - The axis of western end of monsoon trough at mean sea level continues to run close to foothills of Himalayas. The eastern end of monsoon trough now passes through Muzaffarpur, Purnea, Malda and thence southeastwards to northeast Bay of Bengal across Bangladesh.
  - The upper air cyclonic circulation over northern parts of Bihar & neighbourhood now lies over northeast Bihar & neighbourhood between 4.5 km & 5.8 km above mean sea level.
  - An upper air cyclonic circulation lies over west Assam & neighbourhood at 3.1 Km above mean sea level.
  - An upper air cyclonic circulation likely to develop over northwest Bay of Bengal and adjoining Odisha & West Bengal coasts around 17th August.

➤ **Sector wise Forecast for the state of Jharkhand (till noon of 23<sup>rd</sup> August, 2017):**

Day	Central (Bokaro, Gumla, Hazaribag, Khunti, Ramgarh & Ranchi)	South (Chaibasa, Jamshedpur, Simdega & Saraikela)	NW (Chatara, Garhwa, Koderma, Latehar, Lohardaga & Palamu)	NE (Deoghar, Dhanbad, Dumka, Giridih, Godda, Jamtara, Pakur & Sahebganj)
16.08.17	FWS RA/TS very likely.	WS RA/TS very likely.	FWS RA/TS very likely.	WS RA/TS very likely.
17.08.17	WS RA/TS very likely.			FWS RA/TS very likely.
18.08.17	FWS RA/TS very likely.	FWS RA/TS very likely.		
19.08.17		FWS RA/TS very likely.		
20.08.17		FWS RA/TS very likely.		
Outlook for subsequent Two days		<b>Little change</b>		

➤ **Sector wise Warning for the state of Jharkhand (for next five days):**

Day	Central (Bokaro, Gumla, Hazaribag, Khunti, Ramgarh & Ranchi)	South (Chaibasa, Jamshedpur, Simdega & Saraikela)	NW (Chatara, Garhwa, Koderma, Latehar, Lohardaga & Palamu)	NE (Deoghar, Dhanbad, Dumka, Giridih, Godda, Jamtara, Pakur & Sahebganj)
16.08.17	<b>Moderate Thunderstorm with lightning likely over eastern parts of Jharkhand.</b>			
17.08.17	<b>ISOL heavy rain likely, especially in North-Eastern parts of Jharkhand.</b>			
18.08.17	<b>NIL</b>			
19.08.17				
20.08.17				

## WEATHER FORECAST

**AMFU: RANCHI (Districts: Ranchi, Khunti, Bokaro, Hazaribag, Ramgarh, Chatara, Garhwa, Palamu, Latehar, Lohardaga, Gumla, Simdega)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		17.08.17	18.08.17	19.08.17	20.08.17	21.08.17
BOKARO	Rainfall (mm)	35	27	8	4	5
	Max Temperature (°C)	30	29	29	30	31
	Min Temperature(°C)	24	24	24	24	25
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	84	92	95	92	94
	Min Relative Humidity (%)	59	65	70	66	65
	Wind speed (kmph)	8	10	11	7	9
	Wind direction (deg)	325	110	110	90	100
HAZARIBAGH	Rainfall (mm)	35	27	8	4	5
	Max Temperature (°C)	30	29	29	30	31
	Min Temperature(°C)	24	24	24	24	25
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	90	94	93	92	93
	Min Relative Humidity (%)	64	70	70	65	63
	Wind speed (kmph)	8	8	13	10	10
	Wind direction (deg)	305	155	120	110	115
RAMGARH	Rainfall (mm)	25	20	15	4	5
	Max Temperature (°C)	30	29	28	29	28
	Min Temperature(°C)	22	22	22	23	23
	Total cloud cover (octa)	8	8	8	7	6
	Max Relative Humidity (%)	88	93	95	94	95
	Min Relative Humidity (%)	64	69	72	68	66
	Wind speed (kmph)	8	6	12	9	10
	Wind direction (deg)	320	185	115	100	105
CHATRA	Rainfall (mm)	15	8	8	8	8
	Max Temperature (°C)	33	33	32	32	33
	Min Temperature(°C)	26	26	26	26	26
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	92	94	92	93	93
	Min Relative Humidity (%)	66	70	70	65	63
	Wind speed (kmph)	6	5	14	10	10
	Wind direction (deg)	265	205	115	115	115
RANCHI	Rainfall (mm)	25	20	15	4	5
	Max Temperature (°C)	30	29	28	29	28
	Min Temperature(°C)	22	22	22	23	23
	Total cloud cover (octa)	8	8	8	6	6
	Max Relative Humidity (%)	85	92	96	95	95
	Min Relative Humidity (%)	63	67	73	69	67
	Wind speed (kmph)	7	5	11	9	9
	Wind direction (deg)	325	235	110	80	90
KHUNTI	Rainfall (mm)	25	20	15	4	5
	Max Temperature (°C)	30	29	28	29	28
	Min Temperature(°C)	22	22	22	23	23
	Total cloud cover (octa)	8	8	8	6	5
	Max Relative Humidity (%)	84	91	96	95	95
	Min Relative Humidity (%)	62	66	71	67	67
	Wind speed (kmph)	6	4	9	8	8
	Wind direction (deg)	320	280	105	65	75

AMFU :RANCHI continued ...

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		17.08.17	18.08.17	19.08.17	20.08.17	21.08.17
GUMLA	Rainfall (mm)	35	19	26	12	15
	Max Temperature (°C)	29	29	29	29	28
	Min Temperature(°C)	24	23	23	23	22
	Total cloud cover (octa)	8	8	8	7	5
	Max Relative Humidity (%)	89	94	97	96	96
	Min Relative Humidity (%)	70	69	74	71	68
	Wind speed (kmph)	7	4	10	8	8
	Wind direction (deg)	325	325	115	85	85
SIMDEGA	Rainfall (mm)	27	17	25	17	22
	Max Temperature (°C)	30	30	30	30	29
	Min Temperature(°C)	24	24	23	23	23
	Total cloud cover (octa)	8	8	8	6	5
	Max Relative Humidity (%)	88	92	97	96	96
	Min Relative Humidity (%)	67	66	70	69	66
	Wind speed (kmph)	7	4	8	5	6
	Wind direction (deg)	315	310	120	90	80
LOHARDEGA	Rainfall (mm)	23	11	21	8	8
	Max Temperature (°C)	29	29	30	29	29
	Min Temperature(°C)	24	23	23	23	23
	Total cloud cover (octa)	8	8	8	7	6
	Max Relative Humidity (%)	91	95	96	96	96
	Min Relative Humidity (%)	70	70	74	70	67
	Wind speed (kmph)	7	4	12	8	8
	Wind direction (deg)	305	295	115	95	100
PALAMU	Rainfall (mm)	15	8	8	8	8
	Max Temperature (°C)	33	33	32	32	33
	Min Temperature(°C)	26	26	26	26	26
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	90	94	92	91	92
	Min Relative Humidity (%)	66	67	69	63	61
	Wind speed (kmph)	5	8	12	9	8
	Wind direction (deg)	225	200	110	115	115
GARHWA	Rainfall (mm)	15	8	8	8	8
	Max Temperature (°C)	33	33	32	32	33
	Min Temperature(°C)	26	26	26	26	26
	Total cloud cover (octa)	8	8	8	7	8
	Max Relative Humidity (%)	87	94	93	91	92
	Min Relative Humidity (%)	67	66	71	65	62
	Wind speed (kmph)	5	9	9	7	6
	Wind direction (deg)	215	240	105	110	110
LATEHAR	Rainfall (mm)	15	8	8	8	8
	Max Temperature (°C)	33	33	32	32	33
	Min Temperature(°C)	26	26	26	26	26
	Total cloud cover (octa)	8	8	8	7	7
	Max Relative Humidity (%)	92	95	95	95	95
	Min Relative Humidity (%)	70	68	73	67	65
	Wind speed (kmph)	6	5	10	8	7
	Wind direction (deg)	265	265	115	105	110

**AMFU :DUMKA (Districts: Dumka, Sahebganj, Godda, Pakur, Deoghar, Giridih, Dhanbad, Jamtara, Koderma)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		17.08.17	18.08.17	19.08.17	20.08.17	21.08.17
SAHEBGANJ	Rainfall (mm)	15	20	6	6	7
	Max Temperature (°C)	33	33	33	34	33
	Min Temperature(°C)	26	24	25	25	25
	Total cloud cover (octa)	8	8	8	8	8
	Max Relative Humidity (%)	87	91	92	84	90
	Min Relative Humidity (%)	58	63	64	58	58
	Wind speed (kmph)	8	13	9	8	8
	Wind direction (deg)	180	110	105	100	100
GODDA	Rainfall (mm)	25	20	6	4	6
	Max Temperature (°C)	33	33	33	34	33
	Min Temperature(°C)	26	24	24	24	24
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	86	92	92	84	90
	Min Relative Humidity (%)	55	63	63	59	58
	Wind speed (kmph)	6	14	9	7	8
	Wind direction (deg)	260	105	110	100	100
PAKAUR	Rainfall (mm)	15	20	7	4	8
	Max Temperature (°C)	33	33	33	33	33
	Min Temperature(°C)	26	24	24	24	24
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	84	92	92	85	90
	Min Relative Humidity (%)	55	64	63	59	59
	Wind speed (kmph)	6	14	9	7	9
	Wind direction (deg)	225	110	105	100	100
DUMKA	Rainfall (mm)	35	25	9	4	8
	Max Temperature (°C)	31	30	30	32	32
	Min Temperature(°C)	25	25	25	26	26
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	83	92	92	86	91
	Min Relative Humidity (%)	54	64	63	61	59
	Wind speed (kmph)	4	15	10	8	9
	Wind direction (deg)	297	105	105	95	97
DEVGHAR	Rainfall (mm)	35	25	9	4	8
	Max Temperature (°C)	31	30	30	32	32
	Min Temperature(°C)	25	25	25	26	26
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	84	92	92	86	91
	Min Relative Humidity (%)	56	65	64	62	60
	Wind speed (kmph)	6	14	11	8	9
	Wind direction (deg)	330	100	110	95	100
GIRIDH	Rainfall (mm)	35	25	9	4	8
	Max Temperature (°C)	31	30	30	32	32
	Min Temperature(°C)	25	25	25	26	26
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	87	93	92	88	91
	Min Relative Humidity (%)	61	68	67	63	61
	Wind speed (kmph)	9	12	12	8	9
	Wind direction (deg)	320	105	115	105	105

**AMFU : DUMKA continued ...**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		17.08.17	18.08.17	19.08.17	20.08.17	21.08.17
DHANBAD	Rainfall (mm)	30	20	11	5	9
	Max Temperature (°C)	31	30	30	32	32
	Min Temperature(°C)	25	23	24	23	23
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	81	92	92	88	92
	Min Relative Humidity (%)	54	63	64	62	61
	Wind speed (kmph)	4	15	11	9	9
	Wind direction (deg)	300	105	100	95	95
JAMTARA	Rainfall (mm)	53	33	9	4	7
	Max Temperature (°C)	33	33	32	33	32
	Min Temperature(°C)	25	23	23	23	23
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	82	93	93	88	92
	Min Relative Humidity (%)	56	64	65	63	61
	Wind speed (kmph)	5	14	11	8	9
	Wind direction (deg)	320	105	105	95	100
KODERMA	Rainfall (mm)	35	27	8	4	5
	Max Temperature (°C)	30	29	29	30	31
	Min Temperature(°C)	24	24	24	24	25
	Total cloud cover (octa)	8	8	8	8	7
	Max Relative Humidity (%)	89	93	91	88	90
	Min Relative Humidity (%)	62	69	67	62	60
	Wind speed (kmph)	9	10	13	9	9
	Wind direction (deg)	290	120	115	110	110

**AMFU :DARISAI( Districts: West Singbhum, East Singbhum, Saraikela)**

DISTRICTS	PARAMETERS	FORECAST				
		DAY-1	DAY-2	DAY-3	DAY-4	DAY-5
		17.08.17	18.08.17	19.08.17	20.08.17	21.08.17
WEST-SINGBHUM	Rainfall (mm)	27	27	24	17	28
	Max Temperature (°C)	31	30	30	30	29
	Min Temperature(°C)	24	24	23	23	23
	Total cloud cover (octa)	8	8	8	6	5
	Max Relative Humidity (%)	84	90	95	95	95
	Min Relative Humidity (%)	58	65	68	63	65
	Wind speed (kmph)	4	3	6	6	7
	Wind direction (deg)	305	255	95	50	60
EAST-SINGBHUM	Rainfall (mm)	15	32	18	7	15
	Max Temperature (°C)	33	32	30	30	29
	Min Temperature(°C)	26	25	24	24	24
	Total cloud cover (octa)	8	8	8	6	6
	Max Relative Humidity (%)	80	90	94	94	94
	Min Relative Humidity (%)	51	58	68	66	66
	Wind speed (kmph)	4	9	8	8	9
	Wind direction (deg)	310	130	95	70	65
SARAIKELA	Rainfall (mm)	27	32	17	8	15
	Max Temperature (°C)	33	31	31	31	30
	Min Temperature(°C)	26	25	24	24	24
	Total cloud cover (octa)	8	8	8	6	6
	Max Relative Humidity (%)	82	90	96	95	95
	Min Relative Humidity (%)	56	63	70	66	66
	Wind speed (kmph)	4	5	8	7	8
	Wind direction (deg)	310	190	100	60	65

## **B. AGRO-ADVISORIES (Based on the weather forecast):-**

**AMFU : Ranchi, Dumka & Darisai (i.e. for all Districts of Jharkhand)**

**Up land:** Control weeds in different crops. However, avoid entering in the field of ground nut when crops are at flowering stage. Broadcast urea (Top dressing) in different crops after weeding as per the requirement of the crops. In some pockets, crops like urd, groundnut, arhar, mung etc. are attacked by Bihar Hairy caterpillar. Spray the insecticide Dichlorvos (Nuvan) @ 0.5 ml per liter of water to control the insects. Mix Tipol /Sandovit in the solution or prepare the solution in soap water. Maintain drainage system in the field of all crops and vegetables except rice field. If the upland remained still fallow, farmers may sow the crop like Kulthi and Niger immediately.

**Kulthi:** Select Improved varieties of kulthi like V.L.G.-19 or Birsa kulthi-1. 8 kg of seed is required for sowing in 1 acre. Sow the seed in line at a distance of 30 cm. (Row to row) and 10 cm. (Plant to plant). Before sowing, seeds must be treated with Rhizobium culture.

**Niger:** Select improved varieties of niger like Birsa niger-1, Birsa niger-2, Birsa niger-3, Pooja-1 etc. 2.5 kg of seed is required for sowing in 1 acre. Sow the seed in line at a distance of 30 cm (Row to row) and 15 cm. (Plant to plant).

**Maize:** In fallow medium land, farmers having at least 2 irrigation facilities, may proceed for maize cultivation with least duration varieties. Birsa Vikas Maize -2 which matures in 70 - 80 days or Birsa Maize -1 which matures in 80 - 85 days should be selected for immediate sowing. Don't enter in the field if the crop is at tasseling stage, otherwise fertilization will be disturbed.

**Rice:** After transplanting, maintain the bunds of the field for stagnation of water. Broadcast urea after 20-25 days of transplanting. However, before broadcasting weeding is must. Due to attack of stem borer, the upper leaves and main stem of the plant starts drying. To control the stem borer spray insecticide Monocrotophos 36 E.C. @ 1-2 ml per litre of water and mix Tipol in the solution or prepare the solution in soap water. In case of heavy infestation of the insect, apply granular insecticide like Carbofuran 3 G @ 12 kg per acre) or Forate 10 G (@ 4 kg per acre). However, at the time of broadcasting of granular insecticide, stagnated water in the field is essential. The weather is favourable for the attack of blast disease (in which boat shaped brown spot appears on the leaves. The spots have ash color in center and deep brown stripes on margin). As and when this Symptom appears, immediately spray the fungicide Beam @ 3 gram per 5 liter of water during clear weather. The spraying of Beam also protects the crop against other fungal disease. Mix Sandovit or Tipol @ 5 ml. in 10 liter of the solution of insecticide/fungicide. In absence of Sandovit or Tipol, prepare the solution in soap water which makes the solution sticky and does not washed out completely even after drizzle or light rain.

(Deepak Khakha)

Leave Reserve officer  
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(U Sirivastwa)

Meteorologist - A, for Director  
Meteorological Centre, Ranchi

Forwarded to: Director Agriculture, Ranchi, Jharkhand /Director AIR/Director D.D, Ranchi/State Manager, IKSL Jharkhand/ Secretary Disaster Management, Jharkhand.

M.C.RANCHI UOI No. RNC - DAAS/II/ **1077** Dated 16.08.2017